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BUREAU OF MINES MINERALS YEARBOOK

The Mineral Industry of Connecticut

UNITED STATES DEPARTMENT OF THE INTERIOR

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UNITED STATES DEPARTMENT OF THE INTERIOR • Manuel J. Lujan, Jr., Secretary

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This publication is a chapter from the current Bureau of Mines Minerals Yearbook, comprising *Volume I, Metals and Minerals; Volume II, Area Reports: Domestic; Volume III, Area Reports: International.* The separate volumes of the Yearbook are sold by the Superintendent of Documents, Washington, D.C. 20402.

The Mineral Industry of Connecticut

This chapter has been prepared under a Memorandum of Understanding between the Bureau of Mines, U.S. Department of the Interior, and the State Geological and Natural History Survey of Connecticut, Department of Environmental Protection, for collecting information on all nonfuel minerals.

By Donald K. Harrison[1] and Robert J. Altamura[2]

The value of nonfuel mineral production in Connecticut in 1987 was $122.3 million, a 52% increase compared with that of 1986. Crushed stone and sand and gravel continued to be the two leading mineral commodities produced. In 1987, the combined value of these two commodities accounted for 93% of the State's total mineral production value.

Trends and Developments.—All facets of construction activity grew in the State, residential and commercial buildings leading the way. Aggregate producers were extremely busy and contractors were often hard pressed to find ample supplies. In 1987, Connecticut was also in the fourth year of a 10-year, $10 billion State program of infrastructure improvements. Infrastructure improvements included street paving and repairs on roads, bridges, sewage, and water systems.[3] Although no cement is produced in Connecticut, shipments into the State for construction purposes remained at about the 1986 record-high level of nearly 1 million tons.

Table 1.—Nonfuel mineral production in Connecticut[1]

Mineral	1985		1986		1987	
	Quantity	Value (thousands)	Quantity	Value (thousands)	Quantity	Value (thousands)
Clays thousand short tons	106	$632	157	$975	W	W
Gem stones	NA	W	NA	2	NA	$2
Sand and gravel (construction) thousand short tons	e6,000	e21,000	7,254	25,984	e8,400	e37,000
Stone:						
Crushed do.	7,277	43,937	e7,700	e45,800	11,412	76,668
Dimension do.	20	1,285	e2	e1,653	18	1,646
Combined value of feldspar, mica (scrap), sand and gravel (industrial), and values indicated by symbol W	XX	5,532	XX	6,040	XX	6,959
Total	XX	72,386	XX	80,454	XX	122,275

eEstimated. NA Not available. W Withheld to avoid disclosing company proprietary data; not included with "Combined value" figure. XX Not applicable.
[1]Production as measured by mine shipments, sales, or marketable production (including consumption by producers).

In the advanced materials sector, Howmet Corp., Greenwich, and Ceramiques Techniques Desmarquest (CTD), Trappes, France, formed a joint venture to manufacture and market advanced ceramic products for commercial and military applications in North America. The company, named Hd Ceramics, will be based in Howmet's executive offices in Greenwich.

Table 2.—Nonfuel minerals produced in Connecticut in 1986, by county[1]

County	Minerals produced in order of value
Fairfield	Sand and gravel.
Hartford	Sand and gravel, clays.
Litchfield	Sand and gravel.
Middlesex	Feldspar, sand and gravel, clays, mica.
New Haven	Sand and gravel.
New London	Do.
Tolland	Do.
Windham	Do.
Undistributed[2]	Stone, gem stones.

[1]No production of nonfuel mineral commodities was reported for counties not listed.
[2]Data not available by county for minerals listed.

Legislation and Government Programs.—Continuing concern about the quality of the State's air, land, and water resources resulted in the passage of several laws relating to hazardous waste and resource recovery facilities. Bills signed into law concerning hazardous waste disposal included Public Act (PA) 87-150, PA 87-233, PA 87-332, PA 87-475, and PA 87-561. Bills enacted concerning resource recovery facilities included PA 87-451, PA 87-465, PA 87-489, and PA 87-556. The bills are described in capsule summary form in the "Classified Index of Legislation Enacted by the 1987 General Assembly."[4] Legislation (PA 87-540) was also passed that established a mechanism for the siting of a regional low-level radioactive waste disposal facility. Once enacted, PA 87-438 created civil penalties for violations of coastal management, stream channel encroachment, and navigable water laws regarding removal of sand and gravel, dredging, and stream channel encroachment.

The Connecticut Department of Environmental Protection's plan, "Environment/2000" was approved by the Governor during the year. This environmental management plan includes strategies to (1) determine the availability and use of nonrenewable natural resources, (2) improve information on mineral and soil resources, (3) develop regulations for land-development and mineral extraction, and (4) acquire or set aside areas with critical minerals or soils that should be reserved in the public interest.

The Connecticut Geological and Natural History Survey (CGNHS) continued programs on the collection, interpretation, and dissemination of information on the State's natural resources. Major efforts for the year included topographic, bedrock, and surficial geological mapping; soils investigations; a study of the geology of Long Island Sound;[5] and a radon investigation throughout the State.[6] A map and accompanying report of the mines and quarries of Connecticut showing the location of more than 600 active and abandoned mineral sites was also published during the year.[7]

REVIEW BY NONFUEL MINERAL COMMODITIES

INDUSTRIAL MINERALS

Clays.—Two companies mined common clay for use in the manufacture of common and face brick. K-F Brick Co. mined Pleistocene glacial clay near South Windsor and also quarried Jurassic Age shell near Suffield, both in Hartford County. The Michael Kane Brick Co. operated an open pit mine in Middlesex County.

Feldspar.—In feldspar production Connecticut ranked second nationally after North Carolina. The Feldspar Corp. operated three open pit quarries and a froth flotation plant in the old Middletown Pegmatite District in Portland and Middletown, Middlesex County. Production remained essentially the same as that of 1986. The feldspar was used by the glass and ceramics industry principally as a flux.

Mica.—The Feldspar Corp. recovered scrap mica as a byproduct of feldspar-mining operations in Middletown, Middlesex County. Production was nearly double that of 1986. The mica was sold as a filler and as an additive for well-drilling mud.

Sand and Gravel.—*Construction.*—Construction sand and gravel production is surveyed by the U.S. Bureau of Mines for even-numbered years only. This chapter contains estimates for 1985 and 1987 and actual data for 1986. Data for odd-numbered years are based on annual company estimates.

The value of construction sand and gravel has historically been the second-leading

mineral commodity produced in terms of value. Estimated production in 1987 was 8.4 million tons valued at $37 million. This represented an increase of 16% and 42% in output and value, respectively, over that of 1986. Production was reported in all eight counties in the State. Major uses were for construction and roadbuilding.

Industrial.—Two companies produced industrial sand in the State in 1987. The Feldspar Corp. processed industrial sand as a byproduct of feldspar refining in Middletown, Middlesex County, and U.S. Silica Co. of Connecticut operated a quarry near North Stonington, New London County. Principal uses were for roofing granules, glass products, and filtration.

Stone.—Stone production is surveyed by the U.S. Bureau of Mines for odd-numbered years only. This chapter contains actual data for 1985 and 1987 and estimates for 1986. Data for even-numbered years are based on annual company estimates.

Crushed.—Crushed stone was the State's leading commodity produced. It accounted for almost two-thirds of the State's total mineral value. Crushed stone production totaled 11.4 million tons valued at $76.7 million, a 68% increase in output and 68% increase in value compared with 1986 estimates.

Table 3.—Connecticut: Crushed stone[1] sold or used by producers in 1987, by use

(Thousand short tons and thousand dollars)

Use	Quantity	Value
Coarse aggregate (+1-1/2 inch): Other coarse aggregate	15	104
Coarse aggregate, graded: Concrete aggregate, coarse	321	2,023
Fine aggregate (-3/8 inch): Screening, undesignated	30	180
Coarse and fine aggregates:		
Unpaved road sufacing	42	232
Terrazzo and exposed aggregate	W	44
Other construction[2]	872	4,993
Agricultural: Agricultural limestone	W	247
Other unspecified[3]	10,131	68,847
Total[4]	11,412	76,668

W Withheld to avoid disclosing company proprietary data; included with "Other construction."

[1]Includes limestone, traprock, dolomite, and gneiss.

[2]Includes riprap and jetty stone, filter stone, coarse aggregate (graded), bituminous aggregate (coarse), fine aggregate, combined coarse and fine aggregates, graded road base or subbase, a small amount of agricultural limestone, and data indicated by symbol W.

[3]Includes production reported without a breakdown by end use and estimates for nonrespondents.

[4]Data may not add to totals shown because of independent rounding.

Dimension.—Dimension granite was quarried in New Haven County, and dimension granite and quartzite were quarried in Tolland and Windham Counties. The stone was sold as irregular-shaped stone, rough blocks, and cut stone.

[1]State Mineral Officer, Bureau of Mines, Pittsburgh, PA.

[2]Geologist, State Geological and Natural History Survey of Connecticut, Department of Environmental Protection, Hartford, CT.

[3]Rock Products. Aggregates: 1988 Pegged To Be "Iffy" Year. V. 90, No. 12, Dec. 1987, pp. 45-46.

[4]Greater Hartford Chamber of Commerce. The Classified Index of Legislation Enacted by the 1987 General Assembly. For information on individual bills, write to the Greater Hartford Chamber of Commerce, 250 Constitution Plaza, Hartford, CT 06103.

[5]Lewis, R., and S. W. Needell. Map showing the Quaternary Geology of East-Central Long Island Sound. U.S. Geol. Surv. Miscellaneous Field Studies Map MF-1939B, 1987, 1:125,000 scale.

[6]Thomas, M. A. A Connecticut Radon Study—A Progress Report: Radon in Ground Water. Ed. by Barbara Graves (Proc. of the National Water Well Assoc. Conf., Somerset, NJ, Apr. 7-9, 1987), pp. 347-362.

[7]Altamura, R. J. Bedrock Mines and Quarries of Connecticut. Connecticut Geological and Natural History Survey, Natural Resources Atlas Series, 1987, 1:125,000 scale map plus a 41-pp booklet.

Table 4.—Principal producers

Commodity and company	Address	Type of activity	County
Clays:			
The Michael Kane Brick Co	654 Newfield St. Middletown, CT 06457	Pit and plant	Middlesex.
K-F Brick Co	Box 375 East Windsor Hill, CT 06028	Mine and plant	Hartford.
Feldspar:			
The Feldspar Corp.[1]	Box 99 Spruce Pine, NC 28777	Mines and plant	Middlesex.
Sand and gravel (1986):			
Construction:			
Dan Beard Inc	Box 71, Mary St. Shelton, CT 06484	Pit and plant	New Haven.
Connecticut Sand & Stone Corp	7 West Main St. Plainville, CT 06062	Pit and plants	Hartford and Litchfield.
D.B.D. Inc	Box 62 Brookfield, CT 06805	Pit and plant	Fairfield.
De Siato Sand & Gravel Corp	999 Stafford Rd. Storrs, CT 06268	Pit	Tolland.
R. A. Rawson Sand & Gravel Inc	R.F.D. 1 Putnam, CT 06260	Pits and mill	Windham.
Industrial:			
U.S. Silica Co. of Connecticut	Box 577 Ottawa, IL 61350	Pit and plant	New London.
Stone:			
Crushed:			
Edward Balf Co	Box 11190 Newington, CT 06111	Quarry	Hartford.
O&G Industries Inc	23 Casson Ave. Box 907 Torrington, CT 06790	Quarries	Litchfield and New Haven.
Roncari Industries Inc	1776 South Main St. East Granby, CT 06026	Quarry	Hartford.
Tilcon Tomasso Inc	Box 67 909 Foxen Rd. North Branford, CT 06471	do	Hartford, New Haven, Windham.
York Hill Trap Rock Quarry Co	Westfield Rd. Meriden, CT 06450	do	New Haven.
Dimension:			
Castellucci & Sons Inc	West River St. Providence, RI 02904	do	Do.
R. B. Marriott & Sons Co	Box 67 Oneco, CT 06373	do	Windham.
Wayne C. Williams General Construction Inc.	R.F.D. 1, Conklin Rd. Stafford Springs, CT 06076	do	Tolland.

[1]Also crude mica and industrial sand.

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